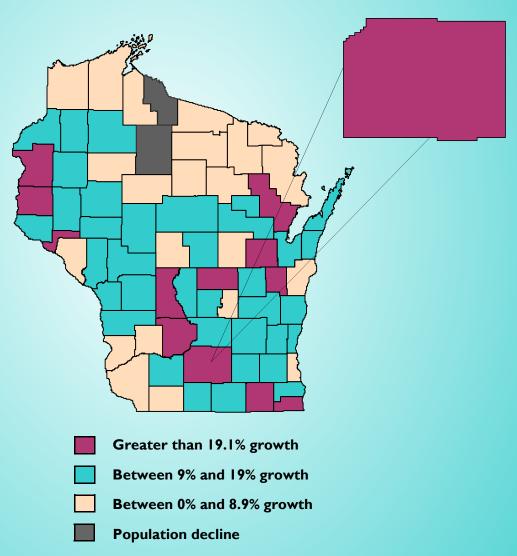
# Dane County Workforce Profile

Projected population growth from 2000 to 2020



Source: Wisconsin Department of Administration, Demographic Services Center. Statewide population growth is projected to be 13.9 percent from 2000 to 2020.



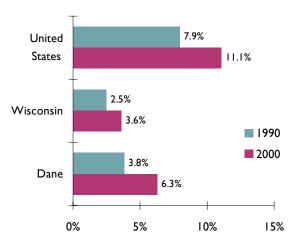
## **County Population**

Population trends affect the supply of workers, the ability to attract employers and the demand for goods and services. Dane County added about 12,355 people or 2.9 percent to its population between the April 2000 Census and the January 2002 population estimate. This growth rate was well above state and national rates. About 45 percent of this growth was located in the City of Madison. Together, the cities of Sun Prairie, Verona and Fitchburg accounted for another 25 percent of the growth.

Much of the growth was due to net migration (people moving in minus people moving out), and natural increase (births minus deaths) was strong. The 2000 Census found that compared to state and national averages, Dane County's residents were more likely to have moved to the county within the last 5 years, and a bit more likely to have moved in from a different state within the last 5 years. Much of this is attributable to the state's flagship university in Madison and indirectly related cultural and employment patterns.

The graph below shows how many residents were foreign-born in the 1990 and 2000 censuses. While still well behind the nation, Dane County remains ahead of the state. Compared to their foreign-born counterparts across the state and the nation, Dane County's foreign-born residents are more likely to have arrived after 1990 and less likely to have arrived before 1980.

## Share of Foreign-born Residents

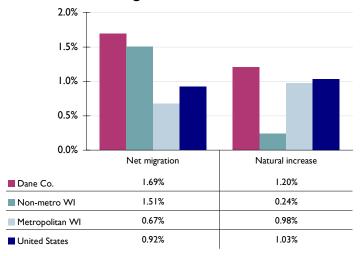


Source: US Dept. of Commerce, Census 2000, Summary file-4, QT-PI4

## **Total Population**

	April 2000 Census	January 1, 2002 estimate	Percent change
United States	281,421,906	286,923,000	2.0%
Wisconsin	5,363,701	5,453,896	1.7%
Dane County	426,526	438,881	2.9%
Largest Municipalities			
Madison, City	208,054	213,679	2.7%
Sun Prairie, City	20,369	21,739	6.7%
Fitchburg, City	20,501	21,257	3.7%
Middleton, City	15,770	16,088	2.0%
Stoughton, City	12,354	12,524	1.4%
Waunakee, Village	8,995	9,435	4.9%
Verona, City	7,052	8,050	14.2%
Monona, City	8,018	7,997	-0.3%
Oregon, Village	7,514	7,727	2.8%
De Forest, Village	7,368	7,688	4.3%

## Net migration and natural increase



Source: Wisconsin DOA, Demographic Services Center & US Census Bureau

Unlike many Wisconsin counties, Dane experienced more births from 1992 to 2001 than it had experienced from 1982 to 1991. In 2001, 51 percent of Dane County's births were to mothers under 30 years old and 83 percent were to mothers under 35. Natural increase (or lack thereof) affects population growth and age demographics, in turn, have an impact on natural increase. The number of female residents in their 20s and 30s affects future birth rates and population growth rates.

Population projections suggest that, between

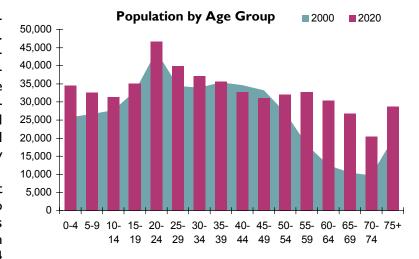
## **Dane County Workforce Profile**

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
2000																
Male	13,106	13,630	14,268	16,626	22,205	17,833	17,384	17,678	17,270	16,339	13,394	8,943	6,098	4,889	4,270	7,087
Female	12,712	13,063	13,465	16,286	21,781	16,639	16,530	17,771	17,389	16,852	13,635	9,282	6,478	5,635	5,417	12,571
2005																
Male	14,335	13,558	14,598	16,747	24,368	18,889	16,848	17,098	17,665	17,226	16,127	12,846	8,394	5,421	4,355	7,932
Female	13,717	13,154	14,028	16,679	23,484	17,538	15,634	16,382	17,765	17,425	16,631	13,208	8,838	6,105	5,298	13,634
2010																
Male	15,060	14,612	14,206	17,019	24,661	20,476	17,650	16,399	16,914	17,451	16,845	15,333	11,966	7,409	4,808	8,501
Female	14,404	13,988	13,817	17,182	24,140	18,672	16,302	15,338	16,215	17,627	17,029	15,953	12,460	8,250	5,701	14,185
2015																
Male	16,409	15,259	15,264	16,298	24,448	20,656	19,078	17,134	16,183	16,674	17,034	15,992	14,274	10,567	6,583	9,247
Female	15,695	14,601	14,658	16,566	24,248	19,107	17,291	15,937	15,131	16,036	17,171	16,286	15,012	11,606	7,697	14,875
2020																
Male	17,663	16,662	15,997	17,529	23,279	20,579	19,329	18,598	16,983	16,030	16,359	16,260	14,983	12,698	9,472	11,349
Female	16,892	15,954	15,356	17,538	23,358	19,275	17,759	16,963	15,780	15,021	15,682	16,491	15,399	14,060	10,898	17,338
Source: V	Source: Wisconsin Dept. of Administration, Demographic Services, October 2003															

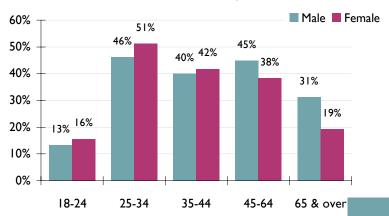
200 and 2020, Dane County will grow by something like 101,008 people, or roughly 24 percent. As baby-boomers age, 3 cohorts (55- to 59-year-olds, 60- to 64-year-olds and 65- to 69-year-olds) will each grow by 14,000 to 18,000 people or roughly 80 percent to 160 percent. Mean-while, the ranks of the 40- to 49-year olds will thin by approximately 4,036 or 5.9 percent and the 35- to 39-year-old group will hold roughly steady.

The county's colleges and universities boost the ranks of 20- to 24-year-olds. The group with 27,733 people aged 10 to 14 in 2000 grows modestly to 33,436 people aged 15 to 19 in 2005, explodes to 48,601 people aged 20 to 24 in 2010. Some air comes out of the bubble by 2015, when there will be 39,763 people aged 25 to 29. By 2020, the group shrinks to 37,088; this is still well above its size in 2000, suggesting that some of the students moving in stay after graduation.

Among Dane County residents 45 and older, the share of males with at least a bachelor's degree exceeds the share of females. The roles reverse in age groups under 45. Compared to metropolitan Wisconsin, fewer of the county's births are to mothers aged 20 to 24 and more are to mothers aged 30 to 35; also more mothers have a college degree. This may reflect women preferring to finish their education and establish a career before starting a family.



## Percent of age group with at least a Bachelor's degree in Dane County



Source: US Dept. of Commerce, Census 2000, Summary file 4, QT-P20

## **Labor Force Characteristics**

The labor force participation rate (LFPR) is the proportion of the eligible population that either works or looks for work. The top right graph shows that labor force participation rates peak around 35 to 54 years old. Some members of younger cohorts occupy themselves with education and parenting. Slowly at age 55 and more quickly at age 62, labor force participation rates fall as older workers leave the labor force.

In recent years, Wisconsin's LFPR has been among the 5 highest in the nation, and Dane County's has been considerably higher than Wisconsin's. Rising costs of housing and education may have pulled more students into the labor force. More affordable housing in other parts of the state (and warmer climates in other states) may encourage people to move once they leave the labor force.

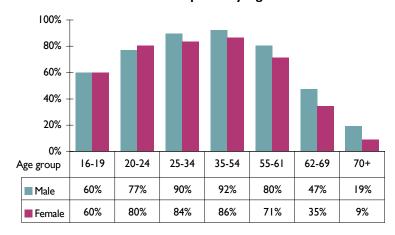
Population trends seen on page 2 cast a different light on labor force participation trends shown in the upper right graph. Large numbers of people will move from the 40- to 49-year old cohorts (where labor force participation is high) into the 60- to 69-year-old cohorts (with low LFPR). High participation rates of 35- to 44-year-olds will not overcome their shrinking numbers. Conversely, the lower participation rates will not stop the absolute number of 55- to 64-year-olds in the labor force increasing considerably by 2020. To hold on to these workers, employers may have to refine retention strategies.

In decades past, employers relied on dramatic increases in female LFPR to replace workers leaving the labor force. Today, female participation rates are much less likely to increase. Together, these trends prompt employers to ask where they will find replacement workers when baby boomers start leaving the labor force in large numbers.

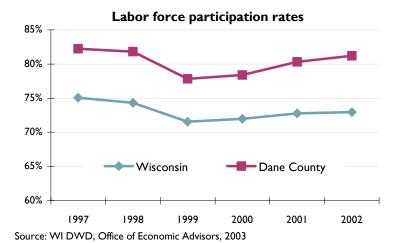
The question's urgency may be increased by older residents' tendency to increase demand for certain types of labor (such as health care or home-related services) when they retire. Dane County has a strong supply of younger workers, many of them with education and training not relating to the services retirees are likely to demand. Moreover, nearby counties short on younger workers may recruit those in Dane County.

Over the course of 2002, an average of

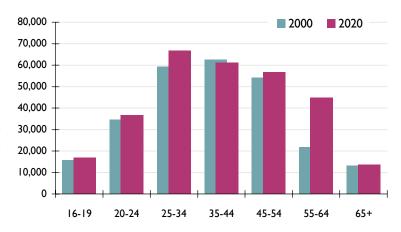
### Dane Labor Force Participation by Age & Sex in 2000



Source: US Dept. of Commerce, Census 2000, Summary file 4, PCT-79



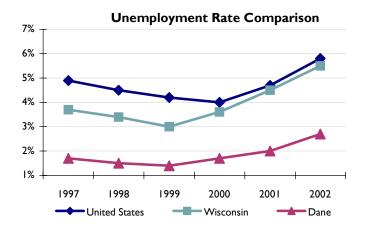
## Labor Force by Age in 2000 & 2020 in Dane County



Source: DWD, Office of Economic Advisors, US Census, SF-4 (PCT-79), WI Demographic Services

## **Dane County Workforce Profile**

roughly 280,305 Dane County residents participated in the labor force; about 272,726 were employed and approximately 7,579, or 2.7 percent, were unemployed. Although local unemployment rates are quite low by state and national standards, several months of 2002 and 2003 seen higher Dane County unemployment rates than the same month has seen in any year from 1990 to 2001. People who consider themselves underemployed (working fewer hours, earning less pay or using fewer skills than they would prefer) do not count as unemployed.



**Dane County Civilian Labor Force Data** 

	1997	1998	1999	2000	2001	2002
Labor Force	259,823	261,618	258,602	266,485	277,505	280,305
Employed	255,366	257,586	255,066	262,042	271,916	272,726
Unemployed	4,457	4,032	3,536	4,443	5,589	7,579
Unemployment Rate	1.7%	1.5%	1.4%	1.7%	2.0%	2.7%

Source: WI DWD, Bureau of Workforce Information, LAUS program, 2003

## **Occupations in demand**

Dane County is part of Wisconsin's south central region. In its upper portion, the table to the right lists those occupations projected to experience the fastest proportional growth between 2000 and 2010. An occupation starting with few jobs doesn't need to add many to grow quickly. Altogether, the fastest-growing occupations accounted for 1.4 percent of the region's jobs in 2000 and are expected to account for 2.0 percent of the region's jobs in 2010, so it is not an exhaustive list of opportunities. The list does not support the notion that most jobs require a bachelor's degree.

In its lower portion, the table lists those occupations projected to generate the most openings between 2000 and 2010. The less training a job requires, the less likely an employer is to invest in retention incentives (such as wage or benefit increases). Nursing requires more training than the other occupations generating the most openings. Challenging work schedules and conditions contribute to turnover, yet nursing programs have long waiting lists. As many nurses and nursing instructors approach retirement, aging baby-boomers will increase demand.

**South Central Region Occupation Projections: 2010** 

		Education & Training	Average
	Top Ten Occupations	Typically Required*	Wage**
	Computer Soft Engnrs Systms Soft	Bachelor's degree	\$30.38
	Computer Support Specialists	Associate degree	\$20.03
th.	Computer Software Engnrs Apps	Bachelor's degree	\$30.31
Growth	Desktop Publishers	Postsecondary voc. trng	\$14.98
Ġ	Network Systms/Data Comm Anal	Bachelor's degree	\$24.96
st	Network/Computer Systems Admin	Bachelor's degree	\$25.79
Fastest	Medical Assts	I-12 mo. on-the-job training	\$12.75
Fa	Medical Records/Health Info Techs	Associate degree	\$13.33
	Fitness Trainers/Aerobics Instruct	Postsecondary voc. trng	\$11.63
	Database Administrators	Bachelor's degree	\$25.64
	Comb Food Prep/Serv Wrk/Incl Fast	I-month or less training	\$8.57
,,	Retail Salespersons	I-month or less training	\$10.09
Openings	Cashiers	I-month or less training	\$7.81
ij	Waiters/Waitresses	I-month or less training	\$6.87
be	Registered Nurses	Bachelor's degree	\$22.76
	Office Clerks/General	I-month or less training	\$11.78
Most	Labrs/Frght/Stock/Matrl Movers/Hand	I-month or less training	\$10.87
Σ	Customer Service Reps	I-12 mo. on-the-job training	\$13.90
	Janitors/Cleanrs Ex Maids/Hskpng	I-month or less training	\$9.84
<u> </u>	Stock Clerks/Order Fillers	I-month or less training	\$10.40

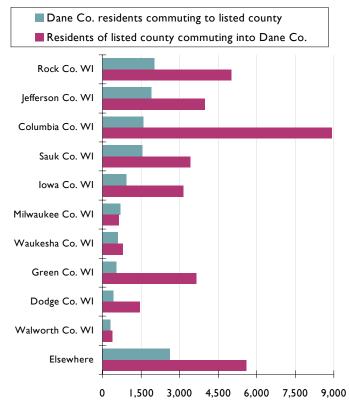
<sup>\*</sup> The most common way to enter the occupation, not the only way

Source: WI DWD, Bureau of Workforce Information, 2002

<sup>\*\*</sup> Wages from Occupation Employment Statistics survey responses for region, 2001 South Central WDA includes Columbia, Dane, Dodge, Jefferson, Marquette and Sauk counties.

## **County Commuting Patterns**

In April 2003, the Census Bureau released county-to-county worker flow files, also known as county commuting patterns. In all, the Census reported approximately 13,157 Dane County residents leaving the county, which amounted to 5.4 percent of working residents by their count. Meanwhile, about 36,985 workers (nearly 14 percent of the people working in Dane County) came in from other coun-



ties. Among the many factors contributing to commuting decisions, prominent ones include industry mix, wages, housing costs and unemployment rates.

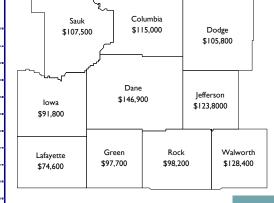
Certain industries, like financial activities and professional & business services, tend to see their jobs, particularly their high-wage jobs, gravitate toward established hubs and metropolitan areas. Workers in such industries may think Dane County is a better place to look for jobs, wages and advancement opportunities. By the same token, the low concentration of manufacturing jobs may contribute to outbound commuting.

The county hosts Wisconsin's seat of government, flagship university, and largest medical school as well as two of the state's leading nursing programs and a renowned research hospital. This creates a concentration of public administration and education & health services jobs.

Aside from industry-specific issues, workers may be pulled in by a 2.7 percent unemployment rate when nearby counties averaged 4.4 percent to 7.0 percent unemployment rates.

On one hand, the all-industries annual average wage in Dane County is over \$35,000 while many surrounding counties are closer to the \$25,000 to \$27,000 range, so there is incentive to work in Dane. On the other hand, housing dollars go farther in surrounding counties. (See map below showing median home values.) People who work in Dane County often consider moving out when they buy their first homes, but they are likely to keep their jobs.

	Dane Co. residents	Residents of listed	Net gain or
	commuting to listed	county commuting	loss of
	county	into Dane Co.	workers
Rock Co. WI	2,020	5,021	3,001
Jefferson Co. WI	1,901	3,971	2,070
Columbia Co. WI	1,581	8,929	7,348
Sauk Co. WI	I,547	3,428	1,881
Iowa Co. WI	928	3,155	2,227
Milwaukee Co. WI	683	635	-48
Waukesha Co. WI	595	783	188
Green Co. WI	541	3,652	3,111
Dodge Co. WI	427	1, <del>44</del> 0	1,013
Walworth Co. WI	311	382	71
Elsewhere	2,623	5,589	2,966



Median home values

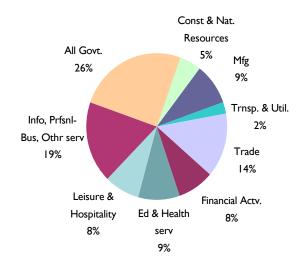
Source: US Dept. of Commerce, Census 2000, County-to-county worker-flow files

Census 2000, Summary File 3, QT-H14

## Industry Employment Introducing NAICS (North American Industry Classification System)

From the 1930s to 2002, some version of the Standard Industrial Classification (SIC) system has defined categories for employment-by-industry estimates. Beginning in 2003, the North American Industry Classification System replaces SIC. The table below lists each system's major categories. A quick glance shows that NAICS offers categories for which data was previously unavailable (like leisure & hospitality or education & health services) and that NAICS offers less detail elsewhere (retail & wholesale trade collapse into one category for non-metropolitan areas).

## **Dane County Industry Distribution: 2002**



The table below hides one wrinkle that may be the most important aspect of SIC-to-NAICS conversion. Even if a category carries an identical title, like "manufacturing", its definition changed, so meaningful comparisons of SIC data to NAICS are very limited. The SIC definition of manufacturing included establishments that now reside in the services category. Elements of printing are now in information services; some establishments providing professional, technical, administrative or support services may have moved from manufacturing into services. These are just a few examples of changes that limit detailed, direct comparisons of historical SIC data to current NAICS data. (Also, NAICS data was revised with newly available information, while SIC was not, due to its discontinuation.)

Under SIC, restaurants and bars were under retail trade, while NAICS puts them in the newly-created leisure & hospitality sector. Other establishments in the leisure & hospitality sector (such as hotels and lodging facilities) came from the services sector of SIC. There is no accurate or reliable way to compare the old trade or services numbers to the new ones.

The figures on this page group the University of Wisconsin-Madison and the affiliated University Hospital and Clinics in Government employment. Figures on page 8 include these jobs in the education & health services sector.

## 2002 Industry Employment in Dane County: A comparison of two classification systems

	<b>Employ-</b>	Distri-		Distri-
NAICS Super-sectors	ment	bution	SIC Industry Divisions	bution
Construction, natural resources & mining	14,600	5%	Construction & Mining	4%
Manufacturing	27,700	9%	Manufacturing	10%
Transportation, warehousing & utilities	7,300	2%	Transportation, utilities & communication	4%
Trade (wholesale & retail)	41,700	14%	Wholesale trade	4%
			Retail trade	17%
Financial activities	24,400	8%	Finance, insurance & real estate	8%
Information, professional & business services,				
other services	53,500	18%	Services & misc (incl. agr, forestry, fishing)	28%
Education and health services	28,000	9%	Government	25%
Leisure & hospitality	23,700	8%		
Government	75.000	25%		

Source: WI DWD, Bureau of Workforce Information, Current Employment Statistics Program, March 2003

## **Dane County Workforce Profile**

Listed in the table at the middle of the page, the ten largest private employers in Dane County accounted for roughly eight percent of the county's jobs. Employers' figures vary from month to month and seasonality varies significantly from employer to employer. For these and other reasons, specific ranks are not necessarily consistent or telling. Data collection issues forced the editor to use a source

for this list which is not necessarily compatible with the largest industry group list.

Listed in the top table, the ten largest industry groups provided approximately 46 percent of the county's total reported jobs. Many of these jobs related to health care or health insurance. Except eating and drinking places, the industries listed tend to require post-secondary education or training.

Top 10 Industry Groups in Dane County

	Marc	ch 2003	Numeric change
Industry Group	<b>Employers</b>	<b>Employees</b>	2002 - 2003
Educational Services	138	33,247	190
Food Services and Drinking Places	699	17,589	541
Professional and Technical Services	1,235	15,194	-1
Insurance Carriers & Related Activities	291	13,902	49
Hospitals	8	12,606	699
Administrative and Support Services	469	10,718	-229
Ambulatory Health Care Services	393	10,713	483
Executive, Legislative, & Gen Government	86	8,414	95
Specialty Trade Contractors	765	7,496	-124
Nursing and Residential Care Facilities	78	6,615	258

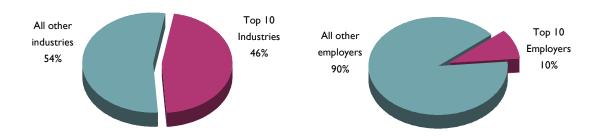
<sup>\*</sup>data surpressed to maintain confidentiality

Top 10 Employers in Dane County

Company	Product or Service	Size	
U.W. Hospital & Clinics	Hospital and clinics	1000 +	
American Family Mutual Insurance Group	Insurance	1000 +	
Meriter Health Services	Hospital health care	1000 +	
Wisconsin Physicians Service Ins. Corp.	Health benefits, insurance and administration	1000 +	
CUNA Mutual Group	Financial services for credit unions	1000 +	
Dean Health System	Health care, clinics, insurance	1000 +	
UW Medical Foundation	Clinical practice group of UW Medical School faculty	1000 +	
Oscar Mayer Foods, division of Kraft Foods	Meat processor	1000 +	
St. Mary's Hospital	Hospital health care	1000 +	
Covance	Drug development	1000 +	

## Share of jobs with top 10 industries

## Share of jobs with top 10 employers



Source: WI DWD, BWI, ES-202 special report, First quarter, 2003; and http://www.madison.com/features/bob/

## b

Overall, Dane County's employers reported paying wages somewhat higher than the state average, with results varying by industry. In 2002, the education & health services sector provided more jobs (66,330) and paid more wages (about \$2.48 billion) than any other sector in Dane County. Between 2001 and 2002, it added more jobs (2,870) than any other sector. The next biggest industry (in terms of wages and employment) was trade, transportation & utilities. the 50,964 jobs in this sector, 30.830 were in the retail trade

segment, where wages were closer to \$21,753; other segments, such as utilities (\$58,700) and wholesale trade (\$43,388) paid higher wages but were considerably smaller, such as utilities (\$58,700) and wholesale trade (\$43,388). The retail trade segment that lost 1,108 jobs in 2002. Shedding jobs in

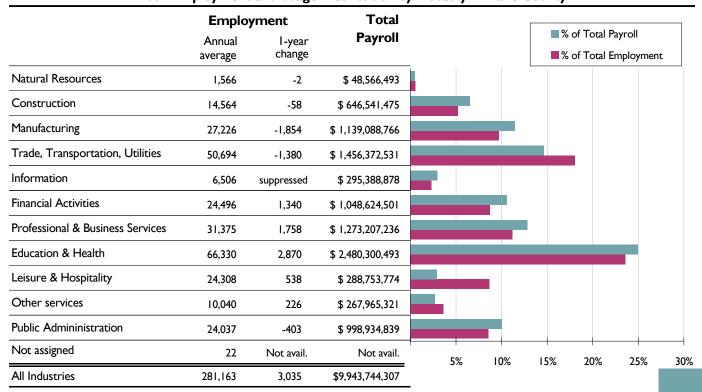
## Average Annual Wage by Industry Division in 2002

	Average	Annual Wage	Percent of	I-year
	Wisconsin	Dane County	Wisconsin	% change
All Industries	\$ 32,422	\$ 35,371	109%	3.7%
Natural resources	\$ 25,481	\$ 31,013	122%	3.4%
Construction	\$ 39,649	\$ 44,393	112%	5.6%
Manufacturing	\$ 40,584	\$ 41,838	103%	5.6%
Trade, Transportation, Utilities	\$ 28,422	\$ 28,729	101%	4.3%
Information	\$ 38,871	\$ 45,403	117%	Not avail.
Financial activities	\$ 40,337	\$ 42,808	106%	4.5%
Professional & Business Services	\$ 36,324	\$ 40,580	112%	1.3%
Education & Health	\$ 33,768	\$ 37,393	111%	3.1%
Leisure & Hospitality	\$ 11,837	\$ 11,879	100%	1.8%
Other services	\$ 19,500	\$ 26,690	137%	3.0%
Public Administration	\$ 33,769	\$ 41,558	123%	2.7%

Source: WI DWD, Bureau of Workforce Information, Covered Employment & Wages, August 2003

the sector's low-wage segment probably helped trade, transportation & utilities boost its overall average wage per worker in 2002. Professional & business services saw second-largest employment gain (1,758 jobs) and the slowest average wage growth (1.3%) of any Dane County sector in 2002.

2002 Employment and Wage Distribution by Industry in Dane County



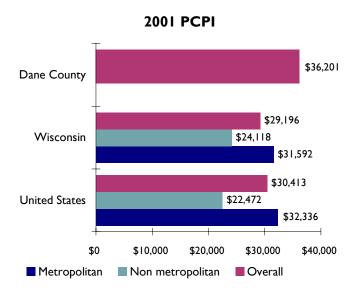
## Per Capita Personal Income

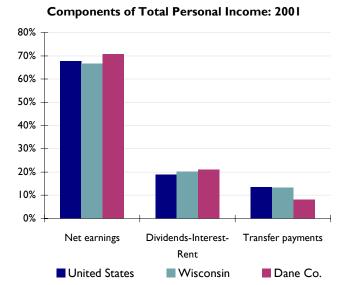
In 2001, Dane County's per capita personal income (PCPI) of \$36,201 was well above metropolitan Wisconsin's PCPI (\$31,592) and the national metropolitan PCPI (\$32,336). Between 1997 and 2001, Dane County's PCPI went from 7.9 percent above the U.S. metropolitan PCPI to 12.0 percent above the U.S. metropolitan PCPI and from 10.0 percent above metropolitan Wisconsin's PCPI to nearly 115 percent of metropolitan Wisconsin's PCPI. Compared to the state and the nation, Dane County's total income was slightly less attributable to transfer payments (such as Social Security) and slightly more attributable to net

earnings (typically associated with employment). This has helped Dane County's PCPI grow quickly because transfer payments grow more much slowly than wages. Some Wisconsin counties with low housing costs seem to attract retirees and wonder about their impact on PCPI as they become increasingly reliant on transfer payments. Population projections suggest that Dane County's older residents may move away. The extraordinarily low unemployment rate, rich mix of technical and professional jobs and steady supply of young workers moving in seems like a fantastic combination that is difficult to achieve elsewhere in the state.

## Per Capita Personal Income

							Percent	Change
	1996	1997	1998	1999	2000	2001	l year	5 year
United States	\$24,270	\$25,412	\$26,893	\$27,880	\$29,760	\$30,413	2.2%	25.3%
Wisconsin	\$23,301	\$24, <del>4</del> 81	\$26,004	\$26,926	\$28,389	\$29,196	2.8%	25.3%
Dane County	\$27,589	\$29,024	\$31,152	\$32,477	\$34,848	\$36,201	3.9%	31.2%





Source: US Dept. of Commerce, Bureau of Economic Analysis, State & Local Personal Income, May 2003, CAI-3, CA05

### WWW addresses of source data

Wisconsin population estimates and projections:

http://www.doa.state.wi.us/dir/index.asp

Education levels of population, labor force participation rates, commuting patterns:

http://www.census.gov/main/www/cen2000.

html

Labor force estimates (employed and unemployed), industry employment, average annual wages:

http://www.dwd.state.wi.us/lmi/

Occupations in-demand:

http://www.dwd.state.wi.us/lmi/wda map.

htm